

LISTING OF CLAIMS

1-29. (Canceled)

30. (New) A photochromic lens having a visible colored appearance, the photochromic lens comprising a multi-layer thin film coating applied on outer surface thereof, the multi-layer thin film coating comprising a plurality of dielectric layers, wherein the film coating reflects an amount less than about 15% of spectral ultraviolet radiation in a range between 315 and 400 nm and reflects an amount equal to or greater than about 10% of light in the visible spectrum in a range between 410 and 800 nm so that the lens exhibits the visible colored appearance.

31. (New) The lens of claim 30, wherein the colored appearance comprises a mirror like appearance.

32. (New) The lens of claim 30, wherein the colored appearance comprises a white silver like appearance.

33. (New) The lens of claim 30, wherein the multi-layer thin film coating reflects less than 6% of spectral ultraviolet radiation.

34. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises SiO_2 layers.

35. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises TiO_2 layers.

36. (New) The lens of claim 30, wherein the plurality of dielectric layers are arranged to alternate low and high refractive indices.
37. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises ZrO_2 layers.
38. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises twelve layers.
39. (New) The lens of claim 38, wherein the multi-layer thin film coating comprises a twelve layer arrangement comprising alternating TiO_2 and SiO_2 layers.
40. (New) The lens of claim 38, wherein the multi-layer thin film coating comprises a twelve layer arrangement comprising TiO_2 , SiO_2 and ZrO_2 layers.
41. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises four layers.
42. (New) The lens of claim 30, wherein the plurality of dielectric layers comprises up to 100 layers.
43. (New) The lens of claim 30, the lens having an activation value of greater than about 25%.
44. (New) The lens of claim 30, the lens having an activation value of greater than about 40%.

45. (New) The lens of claim 30, the lens having an activation value of greater than about 90%.

46. (New) The lens of claim 30, the lens having an activation value of greater than about 297%.

47. (New) The lens of claim 30, the lens having an activation value of approximately the activation value of the uncoated photochromic lens.

48. (New) The lens of claim 39, wherein the dielectric layers are selected and arranged in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, so as to obtain a silver mirror like appearance of the lens.

49. (New) The lens of claim 40, wherein the dielectric layers are selected and arranged in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, so as to obtain a silver mirror like appearance of the lens.

50. (New) The lens of claim 30, wherein the lens is a sunglass lens.

51. (New) A method of creating a colored photochromic lens, the method comprising applying a plurality of dielectric layers onto the outer surface of a photochromic lens wherein the plurality of dielectric layers collectively reflect an amount less than about 15% of spectral ultraviolet radiation in a range between 315 and 400 nm and reflect an amount equal to or greater than about 10% of light in the visible spectrum in a range between 410 and 800 nm so that the lens exhibits a visible colored appearance.

52. (New) The method of claim 51, further comprising applying a twelve layer arrangement comprising alternating TiO₂ and SiO₂ layers.

53. (New) The method of claim 52, further comprising applying twelve layers of TiO₂ and SiO₂ on the photochromic lens in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, in order to obtain a silver mirror like appearance.

54. (New) The method of claim 51, further comprising applying a twelve layer arrangement comprising TiO₂, SiO₂ and ZrO₂ layers.

55. (New) The method of claim 54, further comprising applying twelve layers of TiO₂, SiO₂ and ZrO₂ on the photochromic lens in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, in order to obtain a white silver like appearance.